

REMARKS

Applicants respectfully request reconsideration of this application, and reconsideration of the Office Action dated October 20, 2004. Upon entry of this Amendment, claims 1-4, 6, and 7 will remain pending in this application. The changes to the claims are supported by the specification and original claims. No new matter is incorporated by this Amendment.

* * * * *

Claims 1, 7, and 9 are rejected under 35 U.S.C. § 103(a) as purportedly obvious based on Yoshida et al. (U.S. Pat. No. 6,293,855) in view of Berner et al. (U.S. Pat. No. 6,203,582). Applicants respectfully traverse. Applicants note claim 9 is canceled.

Independent claim 1 (from which the other claims depend) concerns a transfer system for transferring objects to and from a carrier provided on a top face of a load port unit. The load port unit and also a guide rail are mounted on the front wall of the body of the composite system. Specifically, the load port unit is mounted on the outside of the front wall of the system body, while the guide rail is mounted on the inside of such front wall. Hence, both the guide rail and load port unit are commonly fixed to the front wall, and thus both are precisely positioned with respect to each other.

Claim 1 also recites the transfer robot (mounted on the primary side of the linear motor). From claim 1, it is important to note that the robot linearly reciprocates along the guide rail. Because the guide rail and the load port unit are fixed to the same structure (front wall), there is a precise positional relationship between the transfer robot and the carrier positioned on the top face of the load port. As a result, the transfer robot can access the carrier without causing positional errors and can precisely transfer an object (e.g. a wafer) to and from the carrier. Because, in wafer processing systems, a plurality of

stages can be arranged in tiers, with wafers stocked on each stage, such precise movement and positioning of the transfer robot is important.

Yoshida discloses a polishing apparatus. Unlike Applicants' claimed invention, in Yoshida, the load port unit (40) is mounted on the front wall, but the transfer robot (31) is mounted on the bottom. Thus, transfer robot (31) is not mounted on a same structural member, i.e., the front wall, as load port unit (40). Applicants urge that therefore Yoshida's transfer robot cannot access the carrier (41) in a precise manner on the load port unit 40. This is because, unlike the present invention, the load port unit (40) and the transfer robot (31) are not mounted on a common member (the front wall).

Berner fails to remedy the deficiencies discussed above with respect to Yoshida. In Berner, the linear guide (63,64) for mounting the work piece transport unit (62) is mounted on the transport unit guide (66). However, the work piece cassette (16) is not mounted on the transport unit guide (66). Hence, Applicants submit, the work piece unit (62) of Berner likewise cannot access the cassette in a precise manner. Moreover, even if, for the sake of argument, the wafer stored in the carrier of the present invention is considered to correspond to the wafer on the processing modules (20, 22, 24 in Fig. 2), the work piece transport unit (62) and the processing modules (20, 22, 24) still are not mounted on a common carrier structure.

For at least these foregoing reasons, neither Yoshida nor Berner fails to teach or suggest Applicants' claimed structure where a load port unit and a guide rail (supporting the transfer robot) are mounted to the same front wall structure. Therefore, even if the transfer robot (31) of Yoshida is replaced with the transfer robot mounted on the linear motor of Berner, the resulting apparatus still would not enable precise access to the carrier (41) on the load port member. There is nothing in the combined teachings of Yoshida and

Berner that would have suggested employing such an arrangement to those of ordinary skill in the art. Thus, for at least the foregoing reasons, Applicants submit the rejection is overcome and request that it be withdrawn.

* * *

Claims 2 and 3 are rejected under 35 U.S.C. § 103(a) as purportedly obvious based on Yoshida et al. in view of Berner et al., and further in view of Akimoto (U.S. Pat. No. 5,844,662).

Claims 4 and 6 are rejected under 35 U.S.C. § 103(a) as purportedly obvious based on Yoshida et al. in view of Ito (U.S. Pat. No. 5,950,773).

These two rejections are addressed together as similar issues apply to both. Moreover, Applicants respectfully traverse both rejections.

The deficiencies of Yoshida and Berner are discussed above. Neither Akimoto nor Ito remedies these deficiencies. None of the cited patents teaches or fairly suggests a transfer system having both the load port unit and the guide rail mounted on the front wall of the system body with the load port unit mounted on the outside of the front wall and the guide rail mounted inside of such front wall. There is nothing in the teachings of the cited patents which would have motivated those of ordinary skill to have arrived at Applicants' claimed structural arrangement. Hence, in view of the above, Applicants submit both rejections are overcome and request they both be withdrawn.

* * * * *

Applicants respectfully submit that this Amendment and the above remarks obviate the outstanding rejections in this case, thereby placing the application in condition for immediate allowance. Allowance of this application is earnestly solicited.

If any fees under 37 C.F.R. §§1.16 or 1.17 are due in connection with this filing,
please charge the fees to Deposit Account No. 02-4300; Order No. 033082.116.

If an extension of time under 37 C.F.R. § 1.136 is necessary that is not accounted
for in the papers filed herewith, such an extension is requested. The extension fee should
be charged to Deposit Account No. 02-4300; Order No. 033082.116.

Respectfully submitted,
SMITH, GAMBRELL & RUSSELL, LLP

By:


Michael A. Makuch, Reg. No. 32,263
1850 M Street, N.W., Suite 800
Washington, D.C. 20036
Telephone: (202)263-4300
Facsimile: (202) 263-4329

Dated: March 18, 2005